

ABSTRACT

A manufacturing method of carbon nanotubes capable of mass-producing DWCNT with high throughput and a low defect incidence ratio is provided. In a vacuum chamber (1), a first electrode (2) having a hollow (2a) and a rod-like second electrode (3) are included. Inert gas such as helium gas, nitrogen gas, and argon gas is introduced into the vacuum chamber (1), the atmosphere not containing hydrogen gas and oxygen gas is created, and in this state, arc discharge is generated between the first electrode (2) and the second electrode (3). The heat generated by arc discharge is moderately stored on the surface of the inner side surrounded by the first electrode (2), and temperatures on the surface of the first electrode (2) are maintained at the temperatures suitable for producing the DWCNT (8). Thereby, the thready DWCNT (8) can be continuously produced without pause starting with a catalyst (6).